

## Problem Statements Vs. Driving Questions

We often get the question, “what is the difference between a Problem Statement and a Driving Question?” Instead of defining those terms for you, here are four example projects that outline the PS and the DQ, so that you can construct your understanding of the difference. As you read through this document, you might consider any of the following questions:

- 1) What do all the DQ’s have in common? What do all the PS’s have in common?
- 2) How do I use either or both as a teaching tool?
- 3) Is there a best time to introduce one or the other? When is it?
- 4) What is easier to start with when I am coming up with a project idea?

### The Art Electric

**Project Summary:** Students are given the task of making a piece of art that invites interaction by the viewer. The “inviting” aspect of the art must be run by a circuit within the piece of art. The circuit must have parts “in series” and “in parallel”, and must include a “kill switch”. This address physics standards that have to do with circuits, and math standards that have to do with matrices. Students present their work at public display of their art, hopefully at a gallery.

#### **Problem Statement**

**How can we as** artists

**Create** a piece of art that has circuits with specific requirement built into it

**So that** we can display at a local show, and provide the viewer an interactive experience

#### **Driving Question**

How can circuits make art more inviting and participatory?

### The President’s Dilemma

#### **Project Summary:**

Due to a rapid rise in oil prices, the United States is facing a severe economic crisis with high levels of inflation, high unemployment, and slow economic growth . The President, whose approval ratings are plummeting, has asked a Special Task Force of the Council of Economic Advisors to recommend a policy to deal with the crisis without increasing the national debt . The (Student) Task Force is asked to make an oral presentation with visual aides, outlining monetary and fiscal policy recommendations to a panel composed of representatives of various constituencies.

#### **Problem Statement**

**How can we as** members of the Special Task Force of Economic Advisors

**Recommend** monetary and fiscal policies to deal with the crisis in a speech

**So that** the country will adopt those policies, inflation will be curbed, more people will be employed, and the economy will grow

#### **Driving Question**

How can you use monetary and fiscal policy to deal with issues like unemployment, inflation, and economic growth?

## Would You Like Some DNA With Your Fries?

### **Summary:**

Students, as themselves and consumers of mass-produced food, at the outset of the project are exposed to a variety of perspectives regarding the safety and efficacy of Genetically Modified food; they must then carry out further research of GMOs, DNA, coding for traits, and biodiversity, so that they can debate both the merits and the problems with introducing GMOs into the the diet of Americans, and people the world-round.

### **Problem Statement**

**How can we as** consumers of mass-produced food

**Debate** the merits and problems associated with Genetically Modified Food

**So that** we will be informed and healthy consumers

### **Driving question (s)**

How does our understanding of biology support or refute claims about the safety of GMOs?

Is genetic diversity something we should value?

Is all technology progress?

## Adaptation

### **Summary**

A major publisher wants to generate a screenplay about the Holocaust and WWII. Students play the role of screenwriters, tasked with adapting Elie Weisel's novel Night to a screen play, with the request that they do their best to preserve the power of the novel. Different groups adapt different sections of the book and then must synthesize the various sections together.

### **Problem Statement**

**How can we as** screenwriters

**Adapt** Elie Weisel's novel Night to a screenplay

**So that** the general public will be alerted to the atrocities of the holocaust through the movie

### **Driving Question:**

How do you interpret literature into a film without losing the power of the message?

On the last page, there is an explanation/definition of Problem Statement and Driving Question if you would like to see it.



A **Problem Statement** is generally written with the prompts “How can we as... do... so that....” , which is designed to get students to identify the *Who*, *What*, and *Why* of a project.

“**How can we as...**” asks for *the who* – so students define who they are, i.e. their role in the project.

“**do...**” prompts for *the what* – students identify what the main tasks are for the project. Typically, you replace the verb “do” with a different verb that fits the task better.

“**so that...**” prompts for *the why* – students give a reason why someone might perform the tasks outlined in the project.

In general, the Problem Statement is established at the project roll out, so that there is a succinct summary of the project.

A **Driving Question** is an open-ended question that invokes the big ideas or themes addressed by the project. When students create the final product of the project, it will be one of many possible answers to the driving question.